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SOMATOTYPE AND BODY MASS COMPOSITION IN EUROPEAN PORTUGUESE ADULT SPEAKERS

Débora Franco[I,II,a], Fernando Martins[II,III], Mário Andrea[III], Isabel Fragoso[IV,V], Júlia Teles[IV,V]

[I]*Escola Superior de Saúde. Instituto Politécnico de Leiria. Portugal*

[II]*Centro de Linguística. Universidade de Lisboa. Portugal*

[III]*Faculdade de Letras. Universidade de Lisboa. Portugal*

[III]*Faculdade de Medicina. Universidade de Lisboa. Portugal*

[IV]*Faculdade de Motricidade Humana. Universidade de Lisboa. Portugal*

[V]*Centro Interdisciplinar para Estudo da Performance Humana. Lisboa, Portugal*

Introduction: The definition of normative data for speech production involves knowledge of biological differences reflected in the production of linguistic settings. The human body has a specific body composition, which differs from individual to individual, and a specific morphological type.

Objective: The aim of our study was to verify if relationships existed between somatotype, body mass composition and acoustic parameters of voice quality in European Portuguese adult speakers.

Methods: Seventy four adults, 35 male and 39 female, were assessed to obtain anthropometric and acoustic measures. Subjects were also classified as normal and dysphonic speakers. Morphological characterization was done considering their endomorphism, mesomorphism, ectomorphism, body density, body mass index, fat mass, fat percentage (Fat%), and fat free mass. Voice quality analysis of vowels [a], [i] and [u] was based on fundamental frequency (f0), f0 range, first, second, third and fourth formants, intensity, jitter, shimmer, and Harmonic-to-Noise Ratio (HNR).

Results: Multivariate regression analyses were used to identify the morphological variables that significantly predicted acoustic parameters. Height and the ectomorph component have a significant effect on f0 range, whereas Somatotype Attitudinal Distance and Fat% have a significant effect on shimmer and weight, and the mesomorph component on HNR. Additionally, sex and age have a significant effect on frequency parameters, and dysphonia on aperiodic noise variables.

Conclusions: The findings suggested that body composition and somatotype have a relationship with acoustic parameters. Morphological measures can add useful information to voice assessment protocols and should be taken into account when considering particular treatment strategies.

Descriptors: Voice quality; Dysphonia; Acoustic parameters; Somatotype; Body mass composition.

[a] debora.franco@hotmail.com

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FOOD INTAKE QUALITY IN THE PREOPERATIVE AND POSTOPERATIVE OF BARIATRIC SURGERY

Magda Rosa Ramos da Cruz[I,II,III,a], José Simão de Paula Pinto[II,b], Antônio Carlos Ligocki Campos[II,c], Alcides José Branco Filho[III,d], Ana Luíza Savaris Menegotto[III,e], Egon Wildauer[II,f]

[I]*Pontifícia Universidade Católica do Paraná. Paraná, Brazil*

[II]*Universidade Federal do Paraná. Paraná, Brasil*

[III]*Advanced Laparoscopy Center of Parana. Paraná, Brazil*

Introduction: Bariatric surgery is effective treatment for weight loss and metabolic control in morbidly obese patients. It is known that surgery reduces food intake and nutrient absorption facilitating weight loss, although the weight loss in most operations will depend directly on the total energy intake.

Objective: The aim in this paper is to evaluate the food intake quality in the preoperative and postoperative and verify the weight loss in patients who underwent bariatric surgery.

Methods: It was analyzed registration forms of 100 patients from the Nutrition Service of CEVIP with 3 months, 6 months, and 1 year of surgery.

Results: Improvement was observed in the quality of the food intake and increase in physical activity. The fluid intake in these patients is reduced. The protein intake was adequate after one year of surgery. In this study was observed that the bariatric surgery was effective regarding the weight loss and improvement in the food intake.

Conclusions: Special attention should be given in the first year of surgery, in the use of vitamin, mineral, and protein supplements. The nutritionist has an essential role in the postoperative of bariatric surgery, guiding the food intake, encouraging changes in behavior, as well as to prescribe nutritional supplements whenever is necessary.

Descriptors: bariatric surgery; weight loss; food intake.

[a] nutriclinmagda@bol.com.br
[b] simao@ufpr.br
[c] accampos@ufpr.br
[d] ajbranco@terra.com.br
[e] ana_luz@hotmail.com
[f] egon0910@gmail.com